

PEST MANAGEMENT ENHANCEMENT CONSERVATION SECURITY PROGRAM



REDUCE PESTICIDE MOVEMENT BY MANAGING FILTER STRIPS

WHAT:

Filter strips are strips of herbaceous vegetation (grass, legumes, or forbs) adjacent to streams and other sensitive areas (i.e. ponds, lakes, streams, springs, wetlands, sinkholes, etc.) established to enhance pest management. Filter strips are established and managed so 75% or more of runoff water from cropland travels through the vegetation.

WHEN:

Manage filter strip to be actively growing throughout the growing season.

WHERE:

Manage filter strips adjacent to sensitive areas. Only cropland adjacent to streams and other sensitive areas are eligible for this practice.

HOW:

Manage filter strips by clipping, limited grazing and fertilizing to maintain dense vegetation (80 % or more vegetation cover). Re-seed as needed.

All treatments listed as “GENERAL MAINTENANCE ITEMS” must be applied.

HOW MUCH:

All existing and planned filter strips for CSP enhancement payment must exceed 30' wide. Payment will be for each additional 10-foot increments up to 70':

- 40 feet will be paid \$150 per acre/yr. for the additional 10 feet above the minimum.
- 50 feet will be paid \$150 per acre/yr. for the additional 20 feet above the minimum.
- 60 feet will be paid \$150 per acre/yr. for the additional 30 feet above the minimum.

Benefits to Pest Management

- Improve water quality by filtering sediment, nutrients, and pesticides
- Improve habitat for beneficial insects.

Secondary Benefits

- Produce hay.
- Provide wildlife food and cover.
- Periodic Grazing

Location

- Down slope of managed crop or forage areas that have been treated with fertilizer, manure, and/or pesticides. Filter strips are especially needed adjacent to sensitive areas.
- Install filter strips approximately on the contour.
- Filter strips should be established on slopes not to exceed 10%. The runoff area above the filter strip may be steeper.

Vegetation

- Choose plants based on the desired uses or benefits of the filter strip. Vegetation can vary within the strip. Following is a list of plants commonly used to meet intended functions of a filter strip. The list is only intended as a guide and not to be considered a complete list.

Tall Fescue (KY31)**	50 lbs./ac.	Aug. 15-Oct. 1 Feb. 20-April 1
Reed Canarygrass*	25 lbs./ac.	Aug. 15-Oct. 1 Feb. 20-April 1
Common Bermudagrass*	Seed-10 lbs./ac. or Sprigs-30 bu./ac.	May 10-July 1
Switchgrass***	15 lbs./ac.	Dec. 1-July 1
* High tolerance of sedimentation. May become invasive. ** Moderate tolerance of sedimentation. ***High tolerance of sedimentation. Benefits wildlife nesting cover and restoration of native plant community.		

- Natural herbaceous vegetation, except invasive plants, that volunteers may be used when the ground cover exceeds 80% and average plant height at maturity exceeds 6 inches.

Establishment

- Fertilize according to soil test recommendations.
- Use a cultipacker seeder, a no-till drill, grain drill with press wheels, or broadcast and cultipack before and after seeding.
- For quick vegetative establishment, seed 1/2 bushel of cereal rye or wheat or 5 pounds of foxtail millet per acre with the above seeding rates.

General Maintenance Items

- Shallow sheet flow across the filter strip is critical for it to function properly.
- Since filter strips are designed to capture sediment and other pollutants, they must be maintained on a regular basis.
- Avoid using the filter strip as a roadway. If the filter strip must be used for some equipment traffic, the filter strip should be 8 to 10 feet wider than normal.
- Manage grass height to prevent lodging, to slow runoff, and for even flow of runoff water.
- Maintain a minimum height of 4 inches for introduced grasses and 8 inches for switchgrass. Mow or harvest vegetation a minimum of 2 or 3 times per year to promote thick vegetation, unless wildlife is a concern.
- Grazing of vegetative filters should be avoided, unless the area is managed to prevent overgrazing, grazing during wet periods, buildup of manure, and traffic paths. Controlled grazing may be done when the filter area is dry and firm. Maintain 4 inches for introduced grasses and 8 inches for switchgrass.
- Avoid farming practices that cause furrows along the filter strip that would hinder water entry.
- If moldboard plowing is practiced, turn the soil towards the filter strip.
- Avoid spraying chemicals that would harm filter strip vegetation.
- Evaluate the need to lime and fertilize filter strip when fertilizing the remainder of the field according to soil test recommendations.
- Time all field fertilizer, manure, and/or pesticide applications when rainfall intensity is unlikely to produce runoff.
- Inspect the filter strip after establishment, then regularly for any damage. Damaged areas should be fertilized and reseeded during the next recommended seeding date period.

Erosion Control

- Small rills and gullies should be repaired immediately. Small berms or dips constructed across rills or gullies will help reestablish sheet flow.
- Concentrated flow areas should be controlled across filter strips either by installing measures to spread flow across the filter strip or by installing erosion control structures.
- Treat areas of the filter strip when 6 inches of sediment has accumulated. Remove or redistribute accumulated sediment by plowing, disking, grading. Fertilize as necessary before reseeding.
- When control of sedimentation is a concern, the vegetative stem density should be a minimum of one stem per inch.

Wildlife

- To protect ground nesting birds, delay grazing or mowing on the filter strip can be delayed until after August 15. Restrict mowing to no more than once annually.